## ABSTRACT

An optical spectrometer comprises at least two coupling apertures with different mode field diameters, a means for dispersing the light beams exiting each of the coupling apertures along a dispersion axis and at least two decoupling apertures on which the dispersed light beams are imaged and whose mode field diameters each correspond to the mode field diameters of the associated coupling apertures. Due the enlarged mode field diameter, a larger spectral fraction of dispersed light beams, i.e., light of a larger spectral bandwidth, can be coupled into the decoupling aperture than into the decoupling aperture.